

Docket No. 2003-010-A

In the Claims:

Claims 1-27 (canceled)

Claim 28 (Currently Amended) A safe and arm assembly having a safe position and an armed position, comprising:

an input explosive column having a longitudinal axis;

an input charge having a longitudinal axis and first and second ends, the input explosive column being substantially perpendicular to and adjacent the first end of the input charge;

a transfer charge having a longitudinal axis and first and second ends and movable from the safe position to the armed position;

a receptor charge having a longitudinal axis that is substantially collinear with the longitudinal axis of the input charge;

a spot charge disposed adjacent the input explosive column, for initiating the input explosive column;

an initiator chip disposed adjacent the spot charge, for initiating the spot charge;

an output charge disposed adjacent the receptor charge, the receptor charge initiating the output charge;

the features of claim 27;

a base assembly having the output charge disposed therein;

a safe and arm device layer disposed atop the base assembly, the safe and arm device layer including an arming mechanism movable between [[a]] the safe position and [[an]] the armed position, the transfer charge being disposed in the arming mechanism;

a cover plate assembly disposed atop the safe and arm device layer and having the input explosive column, the input charge and receptor charge disposed therein; and

an initiator board assembly disposed atop the cover plate assembly and having the spot charge and the initiator chip disposed therein [[.]] ;

wherein, in the safe position, the transfer charge is remote from both the input charge and the receptor charge; and

wherein, in the armed position, the second end of the input charge overlaps the first end of the transfer charge to thereby initiate the transfer charge, the longitudinal axis of the input charge is substantially parallel to the longitudinal axis of the transfer charge, the receptor charge overlaps the second end of the transfer charge to thereby initiate the receptor charge and the

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longitudinal axis of the receptor charge is substantially parallel with the longitudinal axis of the transfer charge.

Claims 29-33 (canceled)

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